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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,079	09/21/2001	Richard Langan	SP-1318.1 US	4358

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ROBERT W WELSH
EVEREADY BATTERY COMPANY INC
25225 DETROIT ROAD
P O BOX 450777
WESTLAKE, OH 44145

EXAMINER

WILLS, MONIQUE M

ART UNIT PAPER NUMBER

1746

DATE MAILED: 09/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/960,079

Applicant(s)

LANGAN ET AL.

Examiner

Wills M Monique

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☒ Claim(s) 8-23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement(s) filed June 11, 2002 and April 28, 2003 has/have been received and complies with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 .

International Search Report

The JP 01 260755 document cited as an "X" on the International Search Report does not when taken alone teach the instant invention. The reference teaches a battery enclosure and an external electrode contact but is silent to said electrode contact of the same electrically conductive material as the battery enclosure.

The JP 04 106865 document cited as an "X" on the International Search Report does not when taken alone teach the instant invention. The reference teaches a battery enclosure but is silent to an external electrode contact.

The US 4, 059, 718 document cited as an "X" on the International Search Report does not when taken alone teach the instant invention. The reference teaches a battery enclosure and an external electrode contact but is silent to said electrode contact of the same electrically conductive material as the battery enclosure.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Fukuda et al. U.S. Patent 6,001,505.

Fukuda teaches a battery comprising an anode, cathode and electrolyte (example 1) and an external electrode contact 18 made of aluminum (col. 7, lines 18-21) and a battery enclosure comprising plastic layers 24 to 28 and an aluminum metal foil disposed therebetween (col.3, lines 1-5). The outer layer 14 is of a sealable polyolefin (col.3, lines 15-25). The inner protective layer 24 is made of a maleic acid modified polyolefin (col.3, lines 30-35). Each of said layer is a laminate for enclosing the cell (Fig. 2 and col. 2, lines 50-65). Therefore, the instant claims are anticipated by Fukuda.

Claim Objections

Claims 17-20 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Each of said claims defining a method of achieving selective deposition of the seal material and

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protective polymer material. These limitations do not further define the selective deposition of the seal or protective polymer materials.

Allowable Subject Matter

Claims 8,10, 11,12,15-17,19 & 21-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The instant claims would be allowable over the prior art of record because the prior art is silent to the second layer of said electrically conductive material is discontinuous at a location within the seal perimeter of the battery to expose a second surface of the electrically conductive material wherein, at least a portion of the exposed second surface forming the external contact.

Claims 9, 13, 14 & 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The instant claims would be allowable over the prior art of record because the prior art is silent to at least a portion of the exposed first surface outside the seal perimeter forming the external contact.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-7 & 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. U.S. Patent 6,001,505, as applied to claim 1 above, and further in view of Hanafusa et al. U.S. Patent 6,531,246.

Fukuda teaches a thin film battery as described hereinabove.

The reference is silent to a discontinuous first layer of a battery enclosure enabling a portion of the exposes first surface being in electrical contact with an electrode.

However, Hanafusa teaches that it is conventional to employ a discontinuous first layer of a battery enclosure (part 100 of figure 5) such that the first surface 100 is in electrical contact with electrode assembly 1a. This simplified structure increases the mechanical strength of the laminate seal between the battery enclosure and proximate(col. 3, lines 10-15) external electrode contact (terminal section (col. 3, lines 45-50)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the discontinuous layer of Hanafusa in the battery enclosure of Fukuda, to increase the mechanical strength of the laminate seal around the external electrode contact.

Conclusions

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Monique Wills whose telephone number is (703) 305-0073. The Examiner can normally be reached on Monday-Friday from 8:30am to 5:00 pm.

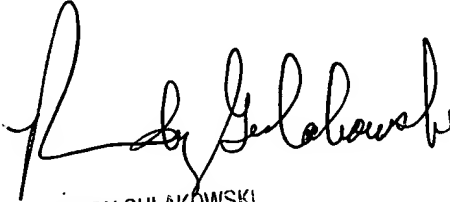
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

If attempts to reach Examiner by telephone are unsuccessful, the Examiner's supervisor, Randy Gulakowski, may be reached at 703-308-4333.

The unofficial fax number is (703) 305-3599. The Official fax number for non-final amendments is 703-872-9310. The Official fax number for after final amendments is 703-872-9311.

Mw

08/25/03


RANDY GULAKOWSKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700